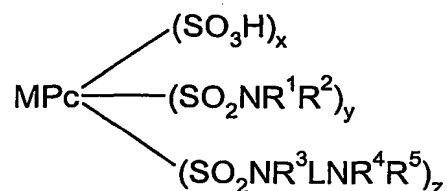


CLAIMS

1. A mixture of phthalocyanine dyes of Formula (1) and salts thereof:

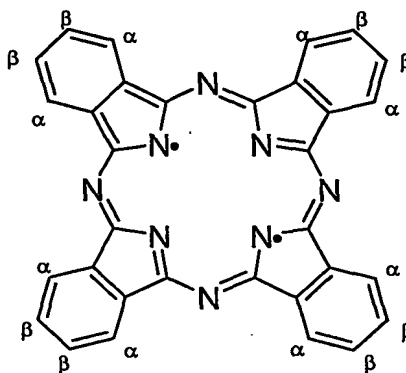


Formula (1)

wherein:

M is Cu or Ni;

Pc represents a phthalocyanine nucleus of formula;



L is optionally substituted C_{1-20} alkylene, alkyenylene or alkynylene, optionally interrupted by $-\text{O}-$, $-\text{NH}-$ or $-\text{S}-$;

R^1 , R^2 , R^3 and R^4 independently are H or optionally substituted C_{1-4} alkyl;

R^5 is H or an optionally substituted hydrocarbyl; or

R^4 and R^5 together with the nitrogen atom to which they are attached represent an optionally substituted aliphatic or aromatic ring system;

x is 0.1 to 3.8;

y is 0.1 to 3.8;

z is 0.1 to 3.8;

the sum of $(x+y+z)$ is 4; and

the substituents, represented by x, y and z, are attached only to a β -position on the phthalocyanine ring.

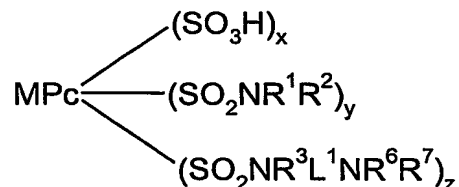
2. A mixture of phthalocyanine dyes according to claim 1 wherein M is Cu.

3. A mixture of phthalocyanine dyes according to either claim 1 or claim 2 wherein x

has a value of 0.5 to 3.5, y has a value of 0.5 to 3.5 and z has a value of 0.5 to 3.5.

4. A mixture of phthalocyanine dyes according to any one of the preceding claims free from fibre reactive groups.

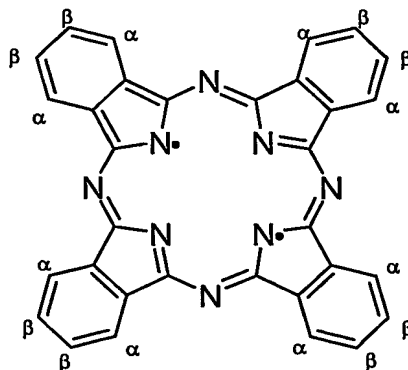
5. A mixture of phthalocyanine dyes according to any one of the preceding claims of Formula (2) and salts thereof:



Formula (2)

wherein:

M Cu or Ni;
Pc represents a phthalocyanine nucleus of formula;



L^1 is optionally substituted C_{1-8} alkylene optionally interrupted by $-\text{O}-$, $-\text{NH}-$ or $-\text{S}-$;

R^1 , R^2 , R^3 and R^6 independently are H or optionally substituted C_{1-4} alkyl;

R^7 is H, optionally substituted aryl, optionally substituted alkyl or optionally heterocyclyl; or

R^6 and R^7 together with the nitrogen atom to which they are attached represent an optionally substituted 5 or 6 membered aliphatic or aromatic ring;

x is 0.1 to 3.8;

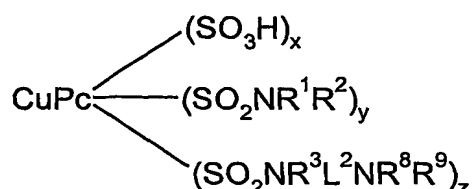
y is 0.1 to 3.8;

z is 0.1 to 3.8;

the sum of $(x+y+z)$ is 4; and

the substituents, represented by x, y and z, are attached only to a β -position on the phthalocyanine ring.

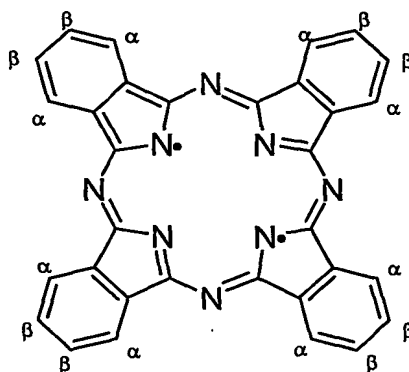
6. A mixture of phthalocyanine dyes according to any one of claims 1 to 4 of Formula (3) and salts thereof:



Formula (3)

wherein:

Pc represents a phthalocyanine nucleus of formula;



L^2 is optionally substituted C_{1-4} alkylene;

R^1 , R^2 , R^3 and R^8 independently are H or methyl;

R^9 is H or phenyl bearing at least one sulfo, carboxy or phosphato substituent and having further optional substituents; or

R^8 and R^9 together with the nitrogen atom to which they are attached represent an optionally substituted 5- or 6- membered aliphatic or aromatic ring;

x is 0.1 to 3.8;

y is 0.1 to 3.8;

z is 0.1 to 3.8;

the sum of $(x+y+z)$ is 4; and

the substituents, represented by x , y and z , are attached only to a β -position on the phthalocyanine ring.

7. A composition comprising a mixture of phthalocyanine dyes according to any one of claims 1 to 7 and a liquid medium.

8. A composition according to claim 7 wherein the liquid media comprises a mixture of water and organic solvent or organic solvent free from water.

9. A composition according to either claim 7 or claim 8 wherein at least 70% by

weight of the total amount of phthalocyanine dye is of Formula (1).

10. A composition according to claim 9 wherein at least 95% by weight of the total amount of phthalocyanine dye is of Formula (1).

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11. A composition according to any one of claims 7 to 10 which is an ink suitable for use in an ink jet printer.

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12. A process for forming an image on a substrate comprising applying an ink according to claim 11 thereto by means of an ink-jet printer.

13. A material printed with a composition according to any one of claims 7 to 11 or a mixture of phthalocyanine dyes as described in any one of claims 1 to 6 or by a process according to claim 12.

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14. An ink-jet printer cartridge comprising a chamber and an ink wherein the ink is in the chamber and the ink is as defined in claim 11.